AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Please cancel claims 1-10 and add new claims 11-29 as follows:

1 – 10 (Canceled)

11. (New): An outgas collection method comprising the steps of:

holding, at a lower side of an exposure chamber under vacuum, a substrate on which a resist film is formed;

irradiating said resist film with an electron beam provided from an electron beam source placed at an upper side of said exposure chamber;

collecting an outgas at a collection unit connected to said exposure chamber, and

absorbing said outgas at said collection unit,

wherein said outgas is released from said resist film when said resist film is irradiated with said electron beam.

12. (New): The outgas collection method of claim 11, wherein said collection unit has an absorption agent.

13. (New): An outgas analysis method comprising the steps of:

holding, at a lower side of an exposure chamber under vacuum, a substrate on which a resist film is formed;

irradiating said resist film with an electron beam provided from an electron beam

source placed at an upper side of said exposure chamber;

collecting an outgas at a collection unit connected to said exposure chamber;

absorbing said outgas at said collection unit; and

analyzing a plurality of constituents of absorbed outgas at an analysis unit connected to said collection unit,

wherein said outgas is released from said resist film when said resist film is irradiated with said electron beam.

14. (New): The outgas analysis method of claim 13, wherein said collection unit has an absorption agent.

15. (New): The outgas analysis method of claim 13, wherein said plurality of constituents of said outgas are analyzed by a gas chromatograph mass spectrometer.

16. (New): The outgas analysis method of claim 13, wherein said outgas is absorbed in an activated carbon placed in said collection unit, and

said plurality of constituents are released from said outgas by heating said activated carbon after collecting and before analyzing.

17. (New): An outgas analysis method comprising the steps of:

holding, at a lower side of an exposure chamber under vacuum, a substrate on which a resist film is formed;

irradiating said resist film with an electron beam provided from an electron beam

source placed at an upper side of said exposure chamber; and

analyzing a plurality of constituents of an outgas,

wherein said outgas is released from said resist film when said resist film is irradiated with said electron beam.

18. (New): The outgas analysis method of claim 17, wherein said plurality of constituents of said outgas are analyzed by a gas chromatograph mass spectrometer.

19. (New): An electron beam aligner comprising:

an exposure chamber;

a substrate holder placed in a lower side of said exposure chamber under vacuum;

a substrate having a resist film, placed on said substrate holder;

an electron beam source placed at an upper side of said exposure chamber; and

a collection unit connected to said exposure chamber,

wherein the collection unit has an absorption agent.

20. (New): The electron beam aligner of claim 19, wherein said absorption agent includes an activated carbon.

21. (New): The electron beam aligner of claim 19, wherein said outgas includes isobutene.

22. (New): An electron beam aligner comprising:

an exposure chamber;

a substrate holder placed in a lower side of said exposure chamber under vacuum;

a substrate having a resist film, placed on said substrate holder;

a collection unit connected to said exposure chamber; and

an analysis unit connected to said exposure chamber,

wherein an outgas released from said resist film when said resist film is irradiated with said electron beam is collected at said collection unit, and

a plurality of constituents of said outgas are analyzed at said analysis unit.

23. (New): The electron beam aligner of claim 22, wherein said collection unit has an absorption agent.

24. (New): The electron beam aligner of claim 22, wherein said analysis unit has a gas chromatograph mass spectrometer.

25. (New): The electron beam aligner of claim 22, wherein said outgas includes isobutene.

26. (New): An electron beam aligner comprising:

an exposure chamber;

a substrate holder placed in a lower side of said exposure chamber under vacuum;

a substrate having a resist film, placed on said substrate holder;

an electron beam source placed at an upper side of said exposure chamber; and

an analysis unit connected to said exposure chamber,

wherein a plurality of constituents of an outgas released from said resist film when said resist film is irradiated with said electron beam are analyzed at said analysis unit.

27. (New): The electron beam aligner of claim 26, wherein said collection unit has an absorption agent.

28. (New): The electron beam aligner of claim 26, wherein said analysis unit has a gas chromatograph mass spectrometer.

29. (New): The electron beam aligner of claim 26, wherein said outgas includes isobutene.